

IN THE SPECIFICATION:

On page 1, after the title and prior to line 5, please add the following new paragraph and headings:

--CROSS-REFERENCE TO RELATED APPLICATION

This application is the U.S. National Stage of International Application Number PCT/IB02/01518 filed May 6, 2002 and published in the English language on November 13, 2003 under International Publication Number WO 03/094553 A1 with International Search Report.

BACKGROUND OF THE INVENTION

1. Technical Field

2. Discussion of Related Art--

On page 1, please amend the paragraphs beginning at line 17 through page 2, line 8 as follows:

Currently, if a mobile terminal device is connecting to a network, a notification is sent to a presence service in the network, so that the network is informed, if the handset is reachable or not. This is executed independently of the presence of a message to be transferred. An SFE in the network usually repeatedly starts delivery attempts until the message can be delivered and a confirmation notification is received. In case the message can not be delivered, the amount of data to be transferred for the multiple delivery attempts of a single message may increase unnecessarily. So it would be desirable to reduce these unsuccessful message delivery attempts, to save network resources. Additionally, a user does not have the choice to reject incoming short messages or multi media messages except when turning off the mobile terminal device. Otherwise he may risk ~~to overflow~~an overflow of the message memory of his terminal device. Typically, a server would subscribe to a ~~users~~user's presence

information, and when the presence status changes it will be notified and can take appropriate actions before delivering a message. The problem here is that the server e.g. MMSC must subscribe to the presence information for every user in the network.

Sometimes it would be desirable for a user to be able to select the attainability status of his mobile terminal device, in accordance with the available communication channels. Presently, the Short Messages (SMs) are sent to the terminal device anyway, and there is presently no way, e.g. in the European Telecommunication Standard Institute (ETSI) specifications, for the user to reject the reception of certain kind of messages.

The standard procedures for delivering SMs can be found in the ETSI specifications for GSMGlobal System for Mobile Communications (GSM) for Short Messages Service (SMS). The standard procedures for delivering MMSmultimedia messages (MMs) are going to be found in the ETSI specifications for Multimedia Messaging Service (MMS) of the 3rd Generation Partnership Project (3GPP).

On page 2, prior to line 10 please add the following heading:

DISCLOSURE OF THE INVENTION

On page 2, please amend the paragraphs beginning at line 26 through page 3, line 9 as follows:

The notification about an unsuccessful delivery attempt is sent to the SFE from the Communication network (CN), and the SFE is no longer occupied with the delivery of said message, as it is now subscribed to a presence service to tell when the next delivery attempt is to be performed. The main advantage is that this subscription is transmitted only once, if a message could not be successfully transmitted in the first attempt. If a device is not available or will not accept a message, only one subscription to the presence service to be notified is transmitted to the presence service, instead of multiple delivery attempts to be performed. Naturally, the SFE may further comprise internal timers to discard a message after a predetermined time, to prevent a SFE memory overflow.

The best example for illustrating this would be a mobile phone user, who is receiving MMs only periodically MMSs, but is frequently using the subway. A mobile terminal

device of such a user may be not available for ~~3 to 4~~three to four times a day but may receive only one message a week. Such a behavior of a user leads to two different scenarios: A permanent notification about the availability of the user device can lead to the fact that the availability notifications from the presence service outnumber the message delivery attempts. Additionally the system can not predict when the user will be available again, so a large number of delivery attempts may be necessary to deliver a single message. Preferably, the use of the method for transmitting messages may be related to a number of messages and changes in availability of said mobile terminal device. So the best and most effortless method for delivering messages can be chosen.

On page 3, please amend the paragraph beginning at line 21 as follows:

In accordance with the invention the method further comprises : receiving of a message destined for a mobile terminal device. This receiving step enables the method to operate fully store-and-forward. This paragraph is only to emphasize that the method can be applied to messages received for forwarding and to messages generated in the SFE. So in the case of e.g. a terminal device classified as unwilling to receive ~~MM4SMMs~~, the SFE may generate an SMS to inform the terminal of ~~MM4SMMs~~ waiting for delivery.

On page 4, please amend the paragraphs beginning on line 30 through page 5, line 10 as follows:

Preferably, said availability information for the acceptance of said messages by said mobile terminal device comprises information selected from the group of : type of message, size of the message, data contents of the message, location of said mobile terminal device and willingness of the user of said mobile terminal device to receive a message. By using such differentiated information for the acceptance of a message, said presence service can be used as a filter to select certain ~~messages, messages~~ not to be transmitted e.g. different messages such as MMS, SMS or any other message type to be developed.

Preferably, said availability information for acceptance for said message is ~~depending~~depends on the properties of said message. Conveniently, said properties are selected from the group of : message type, message size, sender type, and sender. This feature enables a user of a mobile terminal device to select different types of messages to be delivered directly, e.g. all text messages without graphic elements, so as to save

memory space of the mobile terminal device or the like. This feature also enables a user to select or to reject messages from a certain sender which usually transmits e.g. advertisements, or to suppress the delivery of sound data as the mobile terminal may not be capable of processing these data. The feature makes specific filtering available at the presence service or the presence server.

On page 7, prior to line 12, please add the following heading:

BRIEF DESCRIPTION OF THE DRAWINGS

On page 7, prior to line 21, please add the following new heading and amend the paragraph beginning on line 21 as follows:

BEST MODE FOR CARRYING OUT THE INVENTION

Figure 1 is a flowchart of a successful delivery of a MMS in a communication network. In the first step a mobile terminal 2 transfers 22 a multi-media message (MM) to a communication network (CN) 6. The communication network 6 can be one or more base transceiving systems, base stations, repeaters or service providers or any other relaying elements in the respective communication network. The message is transferred from the CN 6 to the Multimedia Message Service Center (MMSC) 12 (~~on the~~in the role of said SFE) in the presence messaging and group services system 10 (Presence Messaging and Group System). This describes that the mobile terminal 2 submits a message to the store and forward entity 12. The presence messaging and group services system 10 is depicted to indicate that the method is not restricted to a single communication network, but can be applied to communication network clusters, of different communication networks connected via gateways such as e.g. personal mobile gateways, too. Then a message delivery is ~~attempted~~:attempted.

On page 8, please amend the paragraph beginning on line 11 as follows:

Figure 2 is a flowchart of a failed delivery attempt of a MMSMM in a communication network. The first steps of the method are basically the same as in figure 1. In the first step a mobile terminal 2 transfers 22 a multi-media message to a base station or CN 6. The message is transferred 24 from the CN 6 to the MMSC 12 in the presence messaging and group services system 10. The MMSC 12 directly transfers 26 the message back to the CN 6, which in turn tries to transfer the message to the mobile station 4. The message delivery will sometimes fail and at this point the MMSC 12 (in the role of the SFE) contacts the presence server to subscribe to the messaging presence information. The transfer of the message fails, and the CN 6 returns “failed delivery” response 32 back to the MMSC 12. Following that, the MMSC 12 will

request to be informed of a notification 34 to the presence service 14 regarding the availability of said mobile station 4. The presence service 14 returns a confirmation 36 of said change in the availability status back to the MMSC 12. The MMSC 12 waits for a notification about a change in the availability status of the mobile station 4 in the presence service 14.